## PATENT SPECIFICATION

DRAWINGS ATTACHED

Inventor: IVAN HARRY PERSSON

838,948

50



THE HARRI PERSON

Application Date: Aug. 26, 1957.

No. 26918/57.

Complete Specification Published: June 22, 1960.

Date of filing Complete Specification: Aug. 19, 1958.

Index at acceptance:—Class 28(1), B, L. International Classification:—A23g.

#### COMPLETE SPECIFICATION

#### Improvements in or relating to Sugar Confectionery

We, ROBERTSON & WOODCOCK LIMITED, a British Company, of Trebor House, Woodford Green, Essex, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention refers to improvements in the manufacture of confectionery of the kind comprising a piece of sugar confectionery which is intended to be consumed by sucking thereon. The piece of confectionery may be mounted on a stick or other holder in the form commonly known as a "lollipop."

According to the invention we provide a method of manufacturing confectionery of the kind which comprises a piece of sugar confectionery intended to be slowly consumed by sucking thereon, said method comprising applying printed matter with edible printing ink to a wafer of edible material and applying said wafer to said piece of sugar confectionery and coating said piece together with said wafer with an opaque edible covering mass.

After applying said wafer to said piece it is preferably coated at least on one side over the wafer with a hard transparent mass (preferably a sugar mass) through which the picture can be seen and which is less soluble than the opaque coating (e.g. a chocolate mass) so that the latter can be licked off without defacing the printed matter.

The above and other features of the invention will now be described by way of example with reference to the accompanying drawings, said features being defined in the appended claims.

In the accompanying drawings:

Figure 1 is a cross-sectional view of a piece of confectionery with holder serving as a base for making a lollipop in accordance with the invention;

Figure 2 is a plan view of the same; Figure 3 is a view similar to Figure 1, but showing a further stage in the manufacture of a lollipop;
Figure 4 is a plan view of the article shown

in Figure 3;
Figure 5 is a view similar to Figure 1, but

showing the finished lollipop; and
Figure 6 is a plan view of a printed wafer

Figure 6 is a plan view of a printed wafer sheet.

The basic piece of boiled sugar confecfectionery 10 should be a more or less flat slab having a length and width each at least four times its thickness. The thickness should be about 2.5 to 4.5 mm and the length and width will usually be from about one inch to three inches.

The piece 10 may be made of toffee and should be coloured to provide a contrast with the picture.

When the toffee mass has been boiled and is still hot it is passed through rollers whereby it is impressed with lines whereby it can be broken into the required shape when cold. At the same time a stick 12 is pressed at one end into the toffee. Also the same rollers form a recess or depression 11 in one surface only of each lollie, this depression being about the same depth as the thickness of the wafer but slightly larger in plan view, e.g. about one millimetre larger in width and length so as to leave a half millimetre margin so that the wafer can be quickly positioned in the de-pression. The upper surface of the wafer is then flush with the outer surface of the lollipop and the wafer will therefore not be detectable in the finished lollipop. The wafer 15 is placed in the depression with its printed side outermost and is applied while the piece 10 is still hot and sticky so that the wafer sticks in position. This may be effected as the pieces are moved along on a conveyor belt.

While still on the conveyor belt the lollipop is coated with a hard transparent mass 14. This must be chosen so that the picture can be seen through it and so that it is considerably

less soluble than the final coating whereby if the final coating is licked off in patches or one part before another (as it generally is) the picture will not be defaced as the child continues to lick the lollipop and will not come off in patches but will be preserved intact until the whole picture is disclosed. Then as the child continues to lick the lollipop the hard sugar or other coating will be dissolved and the picture, wafer and toffee all may be harmlessly consumed. In the case of a hard sugar coating this is preferably made from glucose having a boiling point of 115 to 125° C (preferably 118 to 120° C). If the glucose is obtained in normal liquid solution it should be boiled in order to reduce its water content until its boiling point is 118 to 120° C. A little fat may be added, e.g. 1 to 2 per cent, to stop the glucose from forming a crust. The far may be animal or vegetable fat, e.g. coconut butter. Colouring and flavouring matter may be added so long as the coating is still transparent. The glucose mass is kept hor, e.g. at 70 to 100° C as it will become solid when cold. The glucose is preferably applied only to the one side of the lollipop to form a transparent coating 14 over the wafer and con-tinuing over the surrounding marginal surfaces of the toffee piece so as to have the additional important advantage of holding the wafer firmly in the depression. The glucose may be applied by rollers or brush. The thickness of the glucose layer is preferably from one to four tenths of a millimetre (e.g. two or three tenths) so that it is not too tedious to lick it off, but is not licked off too quickly. The lollipop is now cooled and then passed

The lollipop is now cooled and then passed to an enrobing machine where it is provided with a coating 18 of chocolate or icecream which can more readily be dissolved than the glucose. A chocolate mass is preferred and this is coated on by dipping or otherwise and a stream of air is then blown on to the lollipop in order to remove excess chocolate so that the thickness of the chocolate layer is about one to two millimetres to ensure that the whole of the chocolate coating over the wafer can normally be licked off before any part of the hard sugar or other hard transparent edible coating has been removed down to the picture.

The wafer is made from a cereal preferably rice paper smooth on the side to be printed and flexible so that it can be fed to the printing machine like sheets of paper, e.g. it should be flexible enough to be rolled into a four inch diameter roll without cracking. It is preferably not more than one millimetre (or even half a millimetre) in thickness and desirably from 0.05 to 0.2 millimetre. The wafer is preferably printed with a larger number of pictures and then cut up into the separate small wafers.

The printing should be effected with a light printing pressure so as to avoid crushing the wafers and to facilitate this a suitable ink should be chosen. Moreover the ink must be edible and acceptable to any health or food regulations and also preferably very quick drying so that the printed sheets can be handled without smudging almost immediately after drying. A suitable ink has a base of glycerine and contains colours such as:—

Yellow—colour index No. 640.
Blue—colour index No. 1180.
Red—colour index No. 182.
Black—carbon black and colour index No. 1180.

75

95

If desired two wafers could be applied to one side or two or more pictures may be on one wafer, e.g. side by side or one above the other.

The wafer and toffee may be shaped to resemble a television set and to make it apparent which is the side to be licked in order to disclose the picture.

The picture may be in any one colour including black or two or more colours printed separately with more or less accurately registered positions.

The sheet may be cut by a clicking press provided with ejecting means.

For the purpose of this specification "chocolate" means a sugar confection consisting mainly of cocoa powder, cocoa butter and/or other types of fat and a sugar content of not more than 55 per cent. It may also include some milk solids and flavouring matter.

Instead of a chocolate coating we may use other coatings such as fondant coating, an opaque boiled sugar coating, a coating of sugar crystals, an opaque jelly coating, or icecream.

WHAT WE CLAIM IS:—

1. A method of manufacturing confectionery of the kind which comprises a piece of sugar confectionery and intended to be slowly consumed by sucking thereon, said method comprising applying printed matter with edible printing ink to a wafer of edible material and applying said wafer to said piece of sugar confectionery and coating said piece together with said wafer with an opaque edible covering mass.

2. A method of manufacturing confectionery of the kind which comprises a piece of sugar confectionery mounted on a holder and intended to be slowly consumed by sucking it which method comprises forming said piece of sugar confectionery, applying printed matter of edible ink on a thin flexible edible cereal wafer, applying the wafer to one side of said piece of confectionery, coating said side including the wafer with a hard confectionery, coating said side including the wafer with a hard confectionery, coating said side including the wafer with a hard transparent edible mass, and coating said coated piece with a coating of a chocolate mass, which is more easily dissolved than the sugar mass whereby the chocolate can be licked off without defacing the printed matter.

3. A method as claimed in claim 2, wherein 130

the piece of confectionery is flat toffee and 2.5 to 4.5 mm in thickness and a wafer is applied to one side only of said piece, the wafer is made from a sheet of rice paper of thickness not exceeding 1 mm printed with a large number of pictures or other printed matter and then cut up into separate wafers; the sugar coating is applied only on one side of said piece including the wafer and is mainly glucose and is only one to four millimetres in thickness; and the chocolate coating is from one to two millimetres in thickness.

4. A method as claimed in claim 3, wherein the said piece is formed with a depression slightly larger in area than the wafer and about the same depth to locate the wafer and to avoid the wafer being detectable in the finished piece of confectionery.

5. A method as claimed in claim 3 or 4, wherein the stick is pressed into the hot piece

and the wafer applied to the piece while it is still hot and sticky, the glucose is such as to have a boiling point of 115 to 125° C (preferably 118 to 120° C) and is applied hot and cooled before applying the chocolate coating, and the latter is blown to reduce its thickness to less than two millimetres.

 A method as claimed in claim 1 or 2, wherein the chocolate coating is replaced by icecream.

A method as claimed in claim 1, substantially as described with reference to the accompanying drawings.

8. A lollipop made in accordance with the method claimed in any of the preceding claims.

For the Applicants,
MATTHEWS, HADDAN & CO.,
Chartered Patent Agents,
31/32 Bedford Street, London, W.C.2.

### PROVISIONAL SPECIFICATION

#### Improvements in the Manufacture of Confections

We, ROBERTSON WOODCOCK LIMITED, a British Company, of Trebor House, Woodford Green, Essex, do hereby declare this invention to be described in the following statement:—

The present invention refers to improvements in the manufacture of confections, and more particularly to an improved method of manufacturing confections which are intended to be slowly consumed by sucking thereon, e.g. of the kind comprising a piece of confection supported by a stick member.

tion supported by a stick member.

According to the invention, the method comprises imprinting a wafer of eatable material with pictures in one or more colours and thereupon applying said wafer to an at least substantially permanently-shaped piece of confectionery mass and coating said piece together with said wafer with an opaque cover-

In order that the invention may be fully understood and readily carried into effect, it will be described in detail with reference to the accompanying drawing, which by way of example illustrates various stages of the manufacture of a confection supported by a stick member. Figure 1 shows, in side elevation, a confection of a kind generally available in the trade, consisting of a solid confectionery mass and a wooden stick and forming the starting point of the invention. Figure 2 shows, in side elevation, a wafer intended to be imprinted with a coloured picture. Figure 3 shows the wafer applied to the confection of Figure 1. Figure 4 shows, in sectional elevation, the confection and the wafer enveloped by an outer covering mass. Figure 5 is a plan view of the confection with the wafer, as it appears either before enveloping it with a covering mass or after sucking off the latter.

Referring to the drawing, in practising the invention, permanently-shaped pieces 1 of any suitable confectionery mass, e.g. cola mass, caramel mass or the like, are made in the usual way and provided with a wooden stick 2. The product thus obtained, which is shown in Figure 2, is an ordinary confection for consumption by sucking, which is, however, now intended to be worked up further according to the invention. For the purposes of the present invention, the pieces 1 may preferably be flat and of rounded square shape.

And of rounded square shape.

From plates or sheets of eatable wafer mass which are commercially available, wafers 3 (Figure 3) are stamped which are substantially uniform with the confection 1 but of dimensions of length and width slightly smaller than those of the latter, as may be seen in Figure 5. The thickness of the wafers is also appreciably smaller than that of the confection 1. Before or after the stamping of the wafers, they are provided on one side with imprinted pictures or figures 4 in one or more colours, borrowed for example from "comic 100 strips." The printing is effected by means of any suitable printing dies or stamps and with the use of colouring substances which are approved for colouring foodstuffs. The wafers are then coated with a transparent candy prepared from sugar with an admixture of glucose or prepared from other edible substances so as to fix the pictures 4.

On to each confection 1 is placed a wafer 3 with the pictures turned upwards, as shown in Figure 3, the wafer getting stuck due to the stickiness of the material. The assembly of the confection 1 and the wafer 3 is then dipped into a fluid opaque eatable covering mass, which after drying or setting forms a solid opaque envelope 5 around the two embedded

parts 1 and 3. This covering mass may, for example, consist of chocolate or of a sugar

When the finished confections are sold, the embedded pieces 1 of confectionery mass as well as the wafers 3 with the imprinted pictures 4 are concealed by the covering mass 5. During the consumption the covering mass 5 is first sucked off, the pictures 4 becoming visible after a while. In the form of the confection of th tion 1 and the wafer 3 chosen as an example, the pictures appear against a background resembling the screen of a television receiver.

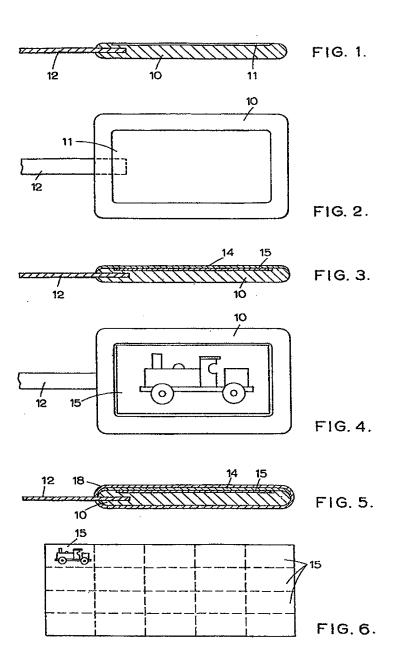
Gradually, the remainder of the confection is also dissolved, being eatable as a whole.

The invention may be applied to other kinds of confectionery in addition to that described, but it is of principal value for producing confections which are usually taken out of the mouth some time during the eating 20 thereof.

For the Applicants, MATTHEWS, HADDAN & CO., Chartered Patent Agents, 31/32 Bedford Street, London, W.C.2.

Leamington Spa: Printed for Her Majesty's Stationery Office, by the Courier Press, 1960. Published by The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.

# 838,948 COMPLETE SPECIFICATION I SHEET This drawing is a reproduction of the Original on a reduced scale.



838,948 PROVISIONAL SPECIFICATION

I SHEET

This drawing is a reproduction of the Original on a reduced scale.

